

REMARKS/ARGUMENTS

Favorable reconsideration of this application, as presently amended and in light of the following discussion, is respectfully requested.

Claims 1-10 are currently pending, Claims 1-4 having been amended. The changes and additions to the claims do not add new matter and are supported by the originally filed specification.

In the outstanding Office Action, Claims 2-5 and 7-10 were objected to for informalities; Claims 1-10 were rejected under 35 U.S.C. §112, first paragraph, as failing to comply with the written description requirement; Claims 1 and 6 were rejected under 35 U.S.C. §102(e) as anticipated by Ejima (U.S. Patent No. 7,176,962); Claims 2 and 7 were rejected under 35 U.S.C. §103(a) as unpatentable over Ejima in view of Satoh et al. (U.S. Patent No. 5,708,863, hereafter “Satoh”); Claims 3 and 8 were rejected under 35 U.S.C. §103(a) as unpatentable over Ejima in view of Satoh and Ohishi et al. (U.S. Patent No. 5,713,049, hereafter “Ohishi”); Claims 4 and 9 were rejected under 35 U.S.C. §103(a) as unpatentable over Ejima in view of Satoh and Yoshihara et al. (U.S. Patent No. 5,172,233, hereafter “Yoshihara”); and Claims 5 and 10 were rejected under 35 U.S.C. §103(a) as unpatentable over Ejima in view of Satoh and Imada (U.S. Pub. No. 2004/0090532).

Applicant thanks the Examiner for the courtesy of an interview extended to Applicant’s representatives on July 15, 2008. During the interview, the rejection under 35 U.S.C. §112, first paragraph, as well as the differences between the claims and the applied art were discussed. Further, clarifying claim amendments were also discussed. The arguments and claims presented during the interview are presented for formal consideration.

With respect to the objections to Claims 2-5 and 7-10, Applicant respectfully submits that the amendments to Claims 2, 3, and 4, as suggested in the Office Action, overcome these grounds of objection.

With respect to the rejection of Claims 1-10 under 35 U.S.C. §112, first paragraph, as failing to comply with the written description requirement, Applicant respectfully traverses this ground of rejection. The Office Action takes the position that “to determine whether a difference in sharpness of the plurality of imaging data is caused by a shake of the digital camera or a movement of the subject based on the compared sharpness,” as recited in Claim 1, is not supported in the originally filed specification (see Office Action, at page 3). For purposes of examination, the Office Action interprets the claimed feature as “wherein a shake of the camera or a blur of the subject is determined corresponding to the comparison result of the sharpness comparison device.” (See Office Action, at page 4).

However, Applicant submits that the features of amended Claim 1 are supported in the originally filed specification. Applicant’s Fig. 5 shows a non-limiting example that includes different exposure periods A and B. Period A is described as the exposure time that the automatic exposure (AE) is controlled in accordance with the brightness of the subject, and B is an exposure time shorter than A (see specification, at page 13, lines 19-21). Fig. 6A shows a comparison of the sharpness evaluated for the different exposure periods A_n and B_n (see page 14, lines 3-10). The Examiner indicated during the interview that Fig. 6A may be construed as showing a comparison of time values in the exposure periods A_n and B_n . However, Fig. 6A makes clear by the headings in the Figure, as well as the corresponding description in the specification (see page 14, lines 3 and 6-10) that what is being compared are sharpness values during the exposure periods A_n and B_n .

A difference in the sharpness values of a plurality of image data such that the sharpness value for A_n is less than the sharpness value for B_n ($A_n < B_n$) indicates that the photographed image is moving (in other words, a blur has occurred) (see page 15, lines 16-19). Then, an additional comparison is made between the sharpness of B_n and $B_n + 1$ (see page 15, lines 20-21). If $B_n = B_n + 1$, then it is determined that the blur is caused by a shake

of the camera (see Fig. 6A and page 15, lines 21-24). If $B_n \neq B_{n+1}$, then it is determined that the blur is caused by the movement of the subject (see Fig. 6A, and page 16, lines 1-4, and page 17, lines 16-17).

Therefore, Applicant submits that the specification clearly provides support for “*a determination on whether a difference in sharpness of the plurality of imaging data indicates a shake of the digital camera or a movement of the subject based on the compared sharpness,*” as defined by Claim 1.

Thus, Applicant respectfully submits that the rejection under 35 U.S.C. §112, first paragraph, must be withdrawn.

With respect to the rejection of Claim 1 under 35 U.S.C. §102(e), Applicant respectfully traverses this ground of rejection. As discussed above, Applicant submits that the Examiner’s rejection under 35 U.S.C. §112, first paragraph was improper and therefore the Examiner’s chosen interpretation of Claim 1 was also improper. Therefore, Applicants submit that the ground of rejection under 35 U.S.C. §102(e) must be withdrawn because it is based on the Examiner’s improper interpretation of Claim 1 which did not address all the features recited in Claim 1.

Additionally, Claim 1 recites, *inter alia*,

a sharpness comparison device configured to compare sharpness based on the plurality of imaging data obtained by the imaging data obtaining device, and to determine whether a difference in sharpness of the plurality of imaging data indicates a shake of the digital camera or a movement of the subject based on the compared sharpness.

Applicant respectfully submits that Ejima fails to disclose or suggest at least these features of amended Claim 1.

Ejima describes a digital camera and digital processing system for correcting motion blur using spatial frequency. Ejima shows in Figure 4 that an image 1 can be captured at a shutter speed of T/2 seconds (step 104) and that an image 2 can be captured at a shutter speed

of T seconds (step 109). The Office Action takes the position that Ejima describes comparing a sharpness based on a plurality of imaging data by comparing spatial frequency components of image 1 and image 2 (see Office Action, at page 3, citing col. 16, lines 20-33 and col. 22, lines 17-20 of Ejima). The Office Action also takes the position that Ejima describes that a shake of the camera or a blur of a subject is determined corresponding to a comparison result of a sharpness comparison device because an image blur is judged by comparing the spatial frequency components of image 1 and image 2 (see Office Action at page 3, citing col. 16, lines 20-33, and col. 21 to col. 22, line 30).

However, Ejima describes comparing the spatial frequency components of images obtained through different exposure times in order to achieve image blur correction (see col. 16, lines 20-34 and step 112 of Figure 4). When performing blur correction, Ejima makes no distinction between blur caused by camera shake or blur caused by movement of the subject. Accordingly, Ejima does not describe determining whether an image blur (from a difference in sharpness of a plurality of imaging data) indicates a shake of the digital camera or a movement of the subject based on a compared sharpness of image data.

Therefore, Ejima fails to disclose or suggest a sharpness comparison device configured to compare sharpness based on a plurality of imaging data obtained by a imaging data obtaining device, and to determine whether a difference in sharpness of the plurality of imaging data indicates a shake of a digital camera or a movement of a subject based on the compared sharpness, as defined by Claim 1.

Thus, it is respectfully submitted that Claim 1 (and all associated dependent claims) patentably distinguishes over Ejima.

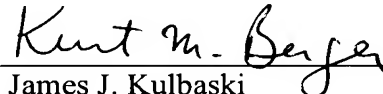
Sato, Ohishi, Yoshihara, and Imada have been considered but fail to remedy the deficiencies of Ejima with regards to Claim 1.

Therefore, it is respectfully submitted that Claim 1 (and all associated dependent claims) patentably distinguishes over Ejima, Satoh, Ohishi, Yoshihara, and Imada, either alone or in proper combination.

Consequently, in light of the above discussion and in view of the present amendment, the outstanding grounds for rejection are believed to have been overcome. The present application is believed to be in condition for formal allowance. An early and favorable action to that effect is respectfully requested.

Respectfully submitted,

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